

winning bidder.

44. How can a proxy model be modified to accommodate technological neutrality?

There is no reason to modify the TS-LRIC proxy model because it reflects the best current state of technology of the most efficient service provider. Thus, it is technology-neutral in the sense that it does not favor any particular technology. Rather, the model is based on the most efficient technology for the circumstance. For example, for longer loop lengths, wireless technology may be used in the model because it is more efficient than wireline and the other available options.

All proxy models should be examined to ensure that they reflect the lowest cost alternative for providing service. It would not be appropriate to use a model based on inefficient technologies because there would be no incentive for carriers to improve efficiencies by implementing new technologies, which, in the long run, would deny consumers one of the major benefits of competition.

45. Is it appropriate for a proxy model adopted by the Commission in this proceeding to be subject to proprietary restrictions, or must such a model be a public document?

Any model upon which the Commission relies to set universal service support must be publicly available and based on publicly available data to ensure that all parties have the opportunity to test the model and the results and, thus, determine the validity of the model. Anything short of this would not comply with established procedural protections for interested parties. In addition, allowing the use of proprietary data would give the party providing the data control over the outcome of the model and, thus, taint the results.

46. Should a proxy model be adopted if it is based on proprietary data that may not be available for public review?

No. See the answer to question 45, supra

47. If it is determined that proprietary data should not be employed in the proxy model, are there adequate data publicly available on current book costs to develop a proxy model? If so, identify the source(s) of such data?

The only book costs that are available to develop a model are those of incumbent LECs. It would not be appropriate to base a proxy model for use in a competitive environment on the incumbent LECs' book costs because they reflect inefficient networks and bloated overheads that were only possible in a monopoly environment. Thus, any proxy model based on these costs would carry these inefficiencies into the new competitive environment, thereby depriving consumers of the benefits of competition -- namely, lower prices and more efficient and advanced technologies. Proxy models must be based on publicly available forward-looking costs, not the LECs' book costs. The Hatfield model, for example, uses data from a study of forward-looking billing and billing inquiries costs from New England Telephone.

48. Should the materiality and potential importance of proprietary information be considered in evaluating the various models?

All aspects of the models considered by the Joint Board and the Commission must be public. If certain information is proprietary, then the parties will not be able to determine if that information is material. Similarly, there is no way for the parties to know whether proprietary information will have a material effect on the results of the model unless they are privy to the proprietary data.

Competitive Bidding

49. How would high-cost payments be determined under a system of competitive bidding in areas with no competition?

High-cost support cannot be determined by competitive bidding where there is only one carrier willing to bid. Even GTE's proposed bidding system uses a cost model to set support in areas

where there is no competition.

50. How should a bidding system be structured in order to provide incentives for carriers to compete to submit the low bid for universal service support?

A bidding system used as the primary method for determining universal service support would not be effective in securing the lowest possible support level because all eligible carriers would be entitled to the level of support determined by the bid. A bidding system is effective in a "winner take all" situation, where entities must submit low bids in order to "win" the business. This is not the case, however, in the context of universal service where all eligible carriers would be entitled to receive universal service support at the level determined by the "winning bid." In this circumstance there would be no incentive for carriers to bid low-- on the contrary, the incentive would be to bid high because there would be no penalty for proposing a losing bid.

MCI favors use of a bidding system only in those rare cases where LECs are unwilling and unable to provide service at the level of support based on TS-LRIC, as discussed in the answer to question 43. Requiring the incumbent LEC to make its network available for resale at net book cost if it loses the bid would ensure that the LEC does not seek to abandon its service area frivolously, and would give the LEC an incentive to bid low so it can retain the use of its plant, including the ability to resell it at the rates allowed under the Commission's interconnection decision.

51. What, if any, safeguards should be adopted to ensure that large companies do not bid excessively low to drive out competition?

The bid must be structured such that companies bid how much support they need, given a specified local rate. The winning bidder (and any other company that wishes to) would then have to provide service at no more than that local rate and would receive the level of support that won the bid. In this scenario, no company would have an incentive to bid a level of support that would not,

when combined with the specified rate, allow the company to meet its costs. Thus, no company would bid below its own costs. A bid could drive out competitors only if the bidding company is truly the low-cost provider for that area. In any event, as discussed in question 50., it is more likely that carriers would bid higher than necessary to secure as much support and profit as possible.

52. What safeguards should be adopted to ensure adequate quality of service under a system of competitive bidding?

The terms of the bidding must be set by the regulator to specify both the service quality requirements and the maximum local rate that can be charged. This would ensure that the bid reflects the cost of providing the level of service desired. Failure to meet the service quality requirements should result in a reduction of the universal service support.

53. How is collusion avoided when using a competitive bid?

As with the Commission's auctions of PCS licenses, the Commission must adopt rules that prohibit collusion, and must advise all potential bidders that the Commission and Department of Justice will enforce the rules.

54. Should the structure of the auction differ if there are few bidders? If so, how?

The structure of the auction should be geared to the anticipated numbers of bidders, as the Commission has done in the PCS and IVDS auctions. The more bidders there are, the fewer rounds there can be in a day, as bidders will need more time to assess the information provided in the bids.

55. How should the Commission determine the size of the areas within which eligible carriers bid for universal service support? What is the optimal basis for determining the size of those areas, in order to avoid unfair advantage for either the incumbent local exchange carriers or competitive carriers?

As discussed in the answer to questions 43. and 50., an auction should be implemented only where carriers are unwilling and unable to provide service based on the costs computed by the proxy

cost model. Carriers that wish to receive support must be required to provide service anywhere in the area covered by the bid. However, the area covered by an auction should be no smaller than a Census Block Group (CBG) to ensure that the incumbent is not simply trying to segment its local market.

Benchmark Cost Model

56. How do the book costs of incumbent local exchange carriers compare with the calculated proxy costs of the Benchmark Cost Model (BCM) for the same areas?

Proxy cost models compute the forward-looking cost of a network given today's most efficient technology and current costs, while a LEC's book costs reflect its costs of equipment over several years. These two amounts are likely to vary. However, the forward-looking costs are the relevant costs in a competitive industry, because those are the costs of the most efficient provider, which all other providers will have to meet.

57. Should the BCM be modified to include non-wireline services? If wireless technology proves less costly than wireline facilities, should projected costs be capped at the level predicted for use of wireless technology?

The proxy cost model used to set universal service support should reflect the lowest cost technology available to serve a given area. If wireless technology is the cheapest alternative for serving an area, then the proxy cost model should report those costs for that area, and support should be based on that lowest cost alternative.

58. What are the advantages and disadvantages of using a wire center instead of a Census Block Group as the appropriate geographic area in projecting costs?

Much of the data used in proxy cost models, such as data regarding population density, is available only at the CBG level. Any attempt to determine population by wire center would require

some mapping of the CBG data to wire center areas, which would not be a perfect match and, therefore, would require the use of arbitrary assumptions that could lead to incorrect results. In addition, because wire centers are a function of the incumbent LEC's network, their use would not be provider-neutral. Finally, since there are more CBGs than wire centers, use of CBGs rather than wire centers would allow support to be targeted to more narrow geographic areas, and would allow competition to develop in more areas.

59. The Maine PUC and several other State commissions proposed inclusion in the BCM of the costs of connecting exchanges to the public switched network through the use of microwave, trunk, or satellite technologies. Those commenters also proposed the use of an additional extra-high-cost variable for remote areas not accessible by road. What is the feasibility and the advisability of incorporating these changes into the BCM?

A proxy cost model should reflect the least cost alternative of providing service to each area. To the extent microwave, trunk, or satellite technologies are lower cost, the cost model should reflect those technologies. Similarly, cost factors used in a proxy cost model should reflect the true costs of providing service. Thus, to the extent remote areas not accessible by road are truly higher cost, a higher cost factor should be applied to them. However, the amount by which the cost factor should be increased must be based on publicly available data on the costs of serving those areas.

60. The National Cable Television Association proposed a number of modifications to the BCM related to switching cost, fill factors, digital loop carrier subscriber equipment, penetration assumptions, deployment of fiber versus copper technology assumptions, and service area interface costs. Which, if any, of these changes would be feasible and advisable to incorporate into the BCM?

A number of the changes suggested by the National Cable Television Association (NCTA) would improve the estimates of network costs in the BCM. For instance, the algorithm for switching costs in the original BCM was based on data for only one type of switch, the Northern Telecom DMS 100, using data that was published in 1990, because this was the only publicly available data that

could be located at the time. The current sponsors of BCM2, recognizing the shortcomings of this switching module, have apparently revised this.

Similarly the fill factors used in the original BCM (and apparently retained in BCM2) were selected to reflect the LECs' best engineering practice for their existing networks. NCTA notes that these fill factors may be too low, because the LECs have excess capacity (and thus a lower fill factor) in their networks to provide services other than the residential service that is to receive universal service support. According to NCTA, the cost of providing those services should not include all the excess capacity built into the network and, therefore, the fill factor should be raised, thereby lowering the cost of universal service.

MCI agrees that the proxy cost model should reflect only the cost necessary for providing the services that receive universal service support and that the fill factor used in BCM should, therefore, reflect only the excess capacity necessary to provide the level of service quality required for universal service. In addition, it would be possible to make the NCTA-proposed adjustment to BCM because the fill factor is a user-specifiable input to the model.

NCTA also is correct that a proxy cost model must reflect the cost of providing only the services that will receive universal service support. Any proxy cost model that the Commission and Joint Board adopt should reflect these costs both in the actual design of the model and in the inputs used in the model.

61. Should the support calculated using the Benchmark Cost Model also reflect subscriber income levels, as suggested by the Puerto Rico Telephone Company in its comments?

No. The Benchmark Cost Model estimates the forward-looking cost of building the network. That cost is unaffected by the income level of subscribers. In addition, the universal service fund

should support high-cost areas. Subsidies for low-income consumers should be handled as discussed in response to question 71, infra.

62. The BCM appears to compare unseparated costs, calculated using a proxy methodology, with a nationwide local benchmark rate. Does use of the BCM suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate? Does the BCM require changes to existing separations and access charge rules? Is the model designed to change as those rules are changed? Does the comparison of model costs with a local rate affordability benchmark create an opportunity for over-recovery from universal service support mechanisms?

Use of a proxy cost model such as the BCM does not suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate. Setting universal service support equal to the difference between the economic cost of the services included in the definition of universal service and an acceptable rate level merely identifies the portion of access charges that are necessary to ensure that local rates are affordable. When the universal service fund is established to recover these costs, access charges must be reduced by an equivalent amount to prevent double-recovery. Separations and access charge rules would have to be changed to remove the amount of universal service support from the interstate jurisdiction and from access charges. The cost model itself is independent of the separations and access charge rules, and thus would not need to change as the separations and access charge rules are changed.

63. Is it feasible and/or advisable to integrate the grid cell structure used in the Cost Proxy Model (CPM) proposed by Pacific Telesis into the BCM for identifying terrain and population in areas where population density is low?

Use of grid cells as in the CPM would require the development by all carriers throughout the country of a database showing exactly where all residential and business customers are in their serving territories. This would be a very expensive undertaking. BCM2 attempts to refine its population distribution for low density areas by mapping the distribution in these areas to the road network. This

method may provide the same or similar results at less cost than use of grid cells.

Cost Proxy Model Proposed by Pacific Telesis

64. Can the grid cell structure used in the CPM reasonably identify population distribution in sparsely-populated areas?

Pacific Bell has developed a database showing the location of all residential and business customers in its territory, but so far has not provided this data for any other state. Developing this data for the entire nation would be very time-consuming, expensive, and very likely would not be made publicly available by the companies, as it would be considered proprietary. These problems would only be increased as more companies enter the local service market. As discussed supra in response to question 45, the Commission should not use proprietary data in developing the universal service support.

65. Can the CPM be modified to identify terrain and soil type by grid cell?

There is no reason in principle why terrain and soil type could not be mapped to the grid cell structure used in the CPM. However, doing so would require assumptions about which terrain and soil type applies to the cell grid, since the data is not collected on the basis of those geographic areas.

66. Can the CPM be used on a nationwide basis to estimate the cost of providing basic residential service?

The only state for which the CPM has been used is California. To use the CPM in other states would require the development of the user input data for each state. If the CPM is to be used on a nation-wide basis to estimate the cost of providing basic residential service, these user inputs must be developed on a consistent basis for all states. In addition, this data would have to be made available to other interested parties so that they could evaluate and comment on the accuracy of the model and the results.

67. Using the CPM, what costs would be calculated by Census Block Group and by wire center for serving a rural, high-cost state (e.g., Arkansas)?

MCI has no information on this issue.

68. Is the CPM a self-contained model, or does it rely on other models, and if so, to what extent?

There are a number of inputs to the CPM which appear to require the use of other models. For example, minutes of use (MOU) and messages per subscriber per month in the busy hour are based on the SCIS model (See Cost Proxy Model: Universal Service Edition User Manual, page 2-2, attached to May 22, 1996 Pacific Telesis Ex Parte).

SLC/CCLC

69. If a portion of the CCL charge represents a subsidy to support universal service, what is the total amount of the subsidy? Please provide supporting evidence to substantiate such estimates. Supporting evidence should indicate the cost methodology used to estimate the magnitude of the subsidy (e.g., long-run incremental, short-run incremental, fully-distributed).

The CCL charge recovers a portion of the loop costs which are allocated to the interstate jurisdiction. The amount of loop costs which are assigned to the interstate jurisdiction is based on an arbitrary assignment of costs. Recovering these costs in the CCL charge to IXCs allows local rates to be lower than they otherwise would be in a world where LEC revenues are set equal to reported costs. As such, the CCL charge is an implicit subsidy to local service charges which is no longer permissible under the 1996 Act. In addition, the CCL charge lowers rates in all areas, not just in high-cost areas which need universal service support. When the Commission implements the explicit universal service fund as advocated by MCI supra, the CCL must be reduced by an equivalent amount.

70. If a portion of the CCL charge represents a contribution to the recovery of loop costs, please identify and discuss alternatives to the CCL charge for recovery of those costs from all interstate telecommunications service providers (e.g., bulk billing, flat rate/per-line charge).

The CCL charge recovers a portion of the local loop costs that are arbitrarily assigned to the interstate jurisdiction. However, there is no "interstate" cost of the local loop; the local loop exists because the end user decides to purchase telephone service. Thus, the end user is the cost causer for the local loop. The cost of the local loop should therefore be recovered from the end user, or through the explicit funding mechanism of the universal service fund as advocated by MCI in those areas where local rates would exceed the national average local service rate.¹⁰

Any recovery of local loop costs from IXC's, even if it were done on a per-end-user basis as in bulk-billing or flat rate/per-line charges, would require the arbitrary assignment of costs to the interstate jurisdiction. This would result in an implicit subsidy of the type which is not allowed under the 1996 Act.

Low-Income Consumers

71. Should the new universal service fund provide support for the Lifeline and Linkup programs, in order to make those subsidies technologically and competitively neutral? If so, should the amount of the lifeline subsidy still be tied, as it is now, to the amount of the subscriber line charge?

The Lifeline and Linkup programs should be tied to the total cost of the loop, as in the proxy models, rather than to the level of the subscriber line charge (SLC). Under MCI's universal service proposal, support is the difference between the nation-wide average local rate and the economic cost of that service. This should allow every area to receive service at the nation-wide average rate.

¹⁰ Because prices for the local loop are currently well above economic cost, recovering the cost of the local loop from end users should not result in an increase in price to the end user.

MCI supports the continuation of the Lifeline and Linkup programs as additional support mechanisms for low-income consumers. These programs, however, must be funded through the new universal service fund in order to make the subsidies technologically and competitively neutral. Thus, the Lifeline subsidy should no longer be implemented through the SLC and any carrier providing service to an individual participating in the Lifeline or Linkup program should be entitled to support from the fund.

Administration of Universal Service Support

72. Section 254(d) of the 1996 Act provides that the Commission may exempt carriers from contributing to the support of universal service if their contribution would be "de minimis." The conference report indicates that "[t]he conferees intend that this authority would only be used in cases where the administrative cost of collecting contributions from a carrier or carriers would exceed the contribution that carrier would otherwise have to make under the formula for contributions selected by the Commission." What levels of administrative costs should be expected per carrier under the various methods that have been proposed for funding (e.g., gross revenues, revenues net of payments to other carriers, retail revenues, etc.)?

Gross revenues for telecommunications services are already reported to the Commission on Form 431 for use in determining Telecommunications Relay Service funding obligations. The cost of providing additional data on payments to other telecommunications carriers should be negligible. The total per-company cost of reporting the data necessary to administer the universal service fund should therefore be negligible. MCI expects that very few telecommunications companies would be exempt from paying into the fund.


Conclusion

MCI respectfully requests that its proposals as reflected herein and in its Comments and Reply Comments be adopted.

Respectfully submitted,

MCI TELECOMMUNICATIONS CORPORATION

By:



Mary J. Sisak
Donald J. Elardo
1801 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
(202) 887-2605

Chris Frentrop
Senior Regulatory Analyst
1801 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
(202) 887-2731

Dated: August 2, 1996

CERTIFICATE OF SERVICE

I, Stan Miller, do hereby certify that copies of the foregoing Comments were sent via first class mail, postage paid, to the following of this 7th day of May, 1996.

The Honorable Reed E. Hundt**
Chairman
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, DC 20554

The Honorable Rachelle B. Chong**
Commissioner
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, DC 20554

The Honorable Susan Ness**
Commissioner
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, DC 20554

The Honorable Julia Johnson
Commissioner
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

The Honorable Kenneth McClure
Vice President
Missouri Public Service Commission
301 W. High Street, Suite 530
Jefferson City, MO 65102

The Honorable Sharon L. Nelson
Chairman
Washington Utilities and Transportation
Commission
P.O. Box 47250
Olympia, WA 98504-7250

The Honorable Laska Schoenfelder
Commissioner
South Dakota Public Utilities Commission
500 E. Capital Avenue
Pierre, SD 57501

Martha S. Hogerty
Public Counsel for the State of Missouri
P.O. Box 7800
Harry S. Truman Building, Room 250
Jefferson City, MO 65102

Deborah Dupont**
Federal Staff Chair
Federal Communications Commission
2000 L Street, N.W. Suite 257
Washington, DC 20036

Paul E. Pederson, State Staff Chair
Missouri Public Service Commission
P O. Box 360
Truman State Office Building
Jefferson City, MO 65102

Eileen Benner
Idaho Public Utilities Commission
P.O. Box 83720
Boise, ID 83720-0074

Charles Bolle
South Dakota Public Utilities Commission
State Capital, 500 E. Capital Avenue
Pierre, SD 57501-5070

William Howden**
Federal Communications Commission
2000 L Street, N.W., Suite 812
Washington, DC 20036

Lorraine Kenyon
Alaska Public Utilities Commission
1016 West Sixth Avenue, Suite 400
Anchorage, AK 99501

Debra M. Kriete
Pennsylvania Public Utilities Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Clara Kuehn**
Federal Communications Commission
2000 L Street, N.W., Suite 257
Washington, DC 20036

Mark Long
Florida Public Service Commission
2540 Shumard Oak Blvd.
Gerald Gunter Building
Tallahassee, FL 32399-0850

Samuel Loudenslager
Arkansas Public Service Commission
P.O. Box 400
Little Rock, AR 72203-0400

Sandra Makeeff
Iowa Utilities Board
Lucas State Office Building
Des Moines, IA 50319

Philip F. McClelland
Pennsylvania Office of
Consumer Advocate
1425 Strawberry Square
Harrisburg, PA 17120

Michael A. McRae
D.C. Office of the People's Counsel
1133 15th Street, N.W., Suite 500
Washington, DC 20005

Rafi Mohammed**
Federal Communications Commission
2000 L Street, N.W., Suite 812
Washington, DC 20036

Terry Monroe
New York Public Service Commission
Three Empire Plaza
Albany, NY 12223

Andrew Mulitz**
Federal Communications Commission
2000 L Street, N.W., Suite 542
Washington, DC 20036

Mark Nadel**
Federal Communications Commission
1919 M Street, N.W., Suite 542
Washington, DC 20036

Gary Oddi**
Federal Communications Commission
2000 L Street, N.W., Suite 257
Washington, DC 20036

Lee Palagyi
Washington Utilities and Transportation
Commission
P O. Box 47250
Olympia, WA 98504-7250

Jeanine Poltronieri**
Federal Communications Commission
2000 L Street, N.W., Suite 257
Washington, DC 20036

James Bradford Ramsay
National Association of Regulatory
Utility Commission
1201 Constitution Avenue, N.W.
Washington, DC 20423

Jonathan Reel**
Federal Communications Commission
2000 L Street, N.W., Suite 257
Washington, DC 20036

Brian Roberts
California Public Utilities
Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Gary Seigel**
Federal Communications Commission
2000 L Street, N.W., Suite 812
Washington, DC 20036

Pamela Szymczak**
Federal Communications Commission
2000 L Street, N.W., Suite 257
Washington, DC 20036

Whiting Thayer**
Federal Communications Commission
2000 L Street, N.W., Suite 812
Washington, DC 20036

Deborah S. Waldbaum
Colorado Office of Consumer Counsel
1580 Logan Street, Suite 610
Denver, Colorado 80203

Alex Belinfante**
Federal Communications Commission
1919 M Street, N.W.,
Washington, DC 20554

Larry Povich**
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Jim Williams
Executive Director
The Federation of American Research
Networks (FARNET)
1112 - 16th Street, NW, Ste. 600
Washington, DC 20036

The Honorable Edward J. Markey
U.S. House of Representatives
2133 Rayburn House Office Building
Washington, DC 20515-2107

Laura L. Wilson
Vice President, Regulatory Affairs &
Regulatory Counsel
Florida Cable Telecommunications Assn.
310 North Monroe Street
Tallahassee, FL 32301

Ted Schultz
Vice President for Administrative Services
Nebraska Association of Hospitals and
Health Systems
1640 L Street, Ste. D
Lincoln, NE 68508-2509

Robert C. Maier
Paul J. Kissman
Board of Library Commissioners
Commonwealth of Massachusetts
648 Beacon Street
Boston, MA 02215

Joe Dudick
Executive Director
Pennsylvania Rural Development Council
Finance Building, Room 506
Harrisburg, PA 17120

Kenneth Stofferahn, Chairman
James A. Burg, Vice-Chairman
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, SD 57501

Lawrence C. St. Blanc, Secretary
Gayle T. Kellner, Esq.
Louisiana Public Service Commission
P O. Box 91154
Baton Rouge, LA 70821-9154

Cathy J. Quinn
General Manager, Regulatory Affairs
Associated Communications & Research
Services, Inc.
817 N.E. 63rd Street
Oklahoma City, OK 73105

Walker Crewson
Executive Deputy Commisioner of Education
The New York State Education Department
Albany, NY 12234

The Honorable William J. Janklow
Governor of the State of South Dakota
State Capitol
500 East Capitol
Pierre, SD 57501-5070

Karen Finstad Hammel, Esq.
Staff Attorney
Montana Public Service Commission
1701 Prospect Avenue
P.O. Box 202601
Helena, MT 59620-2601

M. Robert Sutherland, Esq.
Richard M. Sbaratta, Esq.
Rebecca M. Lough, Esq.
1155 Peachtree Street, NE, Ste. 1700
Atlanta, GA 30309-3610
Counsel for BELLSOUTH CORPORATION,
BELLSOUTH TELECOMMUNICATIONS,
INC.

Maggie Murphy
Policy Intern
STAR Program
300 Centennial Building
658 Cedar Street
St. Paul, MN 55155

B. B. Knowles, Director
Utilities Division
Georgia Public Service Commission
244 Washington Street SW
Atlanta, GA 30334-5701

Norman D. Rasmussen
Executive Vice President
Colorado Independent Telephone
Association, Inc.
3236 Hiwan Drive
Evergreen CO 80439

Alan Dinsmore
Senior Governmental Relations
Representative
Governmental Relations Group
American Foundation for the Blind
1615 M Street, NW, Ste. 250
Washington, DC 20036

Paul W. Schroeder
National Program Associate in Technology
and Telecommunications
American Foundation for the Blind
401 North Michigan Avenue, Ste. 308
Chicago, IL 60611

Allen P. Stayman
Director, Office of Insular Affairs
United States Department of the Interior
Office of the Secretary
Washington, DC 20240

Kweisi Mfume
President & CEO
NAACP
4805 Mt. Hope Drive
Baltimore, MD 21215-3297

Paul Hoff
General Manager/CEO
Park Region Mutual Telephone Company
Underwood, MN 56586

Linda L. Kent, Esq.
Associate General Counsel
U.S. Telephone Association
1401 H Street, NW, Ste. 600
Washington, DC 20005-2164

Delbert D. Smith, Esq.
Stefan M. Lopatkiewicz, Esq.
Bridgitte L. Adams, Esq.
Reed Smith Shaw & McClay
1301 K Street, NW, East Tower
Washington, DC 20005
COUNSEL FOR U.S. DISTANCE
LEARNING ASSOCIATION

Robert G. Pennington
Program Director
Mountaineer Doctor TeleVision-MDTV
Robert C. Byrd Health Sciences Center
West Virginia University
Morgantown, WV 26506

Adrienne G. Southgate, Esq.
General Counsel
Public Utilities Commission
State of Rhode Island and Providence
Plantations
100 Orange Street
Providence, RI 02903

Robert F. Manifold, Esq.
Assistant Attorney General
Public Counsel Section Office of Attorney
General
900-4th Street, NW, Ste. 2000
Seattle, WA 98164
COUNSEL FOR NATIONAL
ASSOCIATION OF STATE UTILITY
CONSUMER ADVOCATES (NASUCA)

Mary Gubisch
Assistant Director
NASUCA
1113 - 15th Street, NW, Ste. 575
Washington, DC 20005

Marilyn Mohrman-Gillis
Vice President, Policy & Legal Affairs
Lonna M. Thompson
Director, Legal Affairs
Association of America's Public Television
Stations
1350 Connecticut Avenue, NW, Ste. 200
Washington, DC 20036

The Honorable Albert Vann
New York State Assembly
Legislative Office Building, Room 422
Albany, NY 12248

Joe D. Edge, Esq.
Richard J. Arsenault, Esq.
Drinker Biddle & Reath
901 - 15th Street, NW
Washington, DC 20005
COUNSEL FOR PUERTO RICO
TELEPHONE COMPANY

Steve Ellenbecker, Chairman
Doug Doughty, Deputy Chairman
Kristin H. Lee, Commissioner
Wyoming Public Service Commission
700 West 21st Street
Cheyenne, WY 82002

John G. Strand, Chairman
John C. Shea, Commissioner
David A. Svanda, Commissioner
Public Service Commission
State of Michigan
6545 Mercantile Way
P O. Box 30221
Lansing, MI 48909-7721

Blossom A. Peretz, Esq.
Ratepayer Advocate
Division of Ratepayer Advocate
Department of the Treasury
State of New Jersey
31 Clinton Street, 11th Floor
P O. Box 46005
Newark, NJ 07101

Alfred M. Mamlet, Esq.
Philip L. Malet, Esq.
Marc A. Paul, Esq.
Steptoe & Johnson, LLP
1330 Connecticut Avenue, NW
Washington, DC 20036
COUNSEL FOR TELEFONICA LARGA
DISTANCIA DE PUERTO RICO, INC.

Jeffrey F. Beck, Esq.
Jellisa Bronfman, Esq.
Beck & Ackerman
4 Embarcadero Center, Ste. 760
San Francisco, CA 94111

Thomas K. Crowe, Esq.
Michael B. Adams, Jr., Esq.
Law Offices of Thomas K. Crowe, P.C.
2300 M Street, NW, Ste. 800
Washington, DC 20037
COUNSEL FOR THE COMMONWEALTH
OF THE NORTHER MARIANA ISLANDS

Daniel L. Brenner, Esq.
Neal M. Goldberg, Esq.
David L. Nicoll, Esq.
1724 Massachusetts Avenue, NW
Washington, DC 20036
COUNSEL FOR THE NATIONAL CABLE
TELEVISION ASSOCIATION, INC.

Lawrence W. Katz, Esq.
1320 North Court House Road, 8th Floor
Arlington, VA 22201
COUNSEL FOR THE BELL ATLANTIC
TELEPHONE COMPANIES

Joseph DiBella, Esq.
1300 Eye Street, NW, Ste. 400 West
Washington, DC 20005
COUNSEL FOR THE NYNEX TELEPHONE
COMPANIES

Chris Frentrup
Senior Regulatory Analyst
MCI Communications Corporation
1801 Pennsylvania Avenue, NW
Washington, DC 20006

Steven T. Nourse, Esq.
Assistant Attorney General
Public Utilities Section
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Richard Civile
The Center of Civic Networking, Inc.
PO Box 53152
Washington, DC 20008

Joseph P. Markoski, Esq.
James M. Fink, Esq.
Squire, Sanders & Dempsey
1201 Pennsylvania Avenue, NW
Washington, DC 20044
COUNSEL FOR
TECHNOLOGY ASSOCIATION OF
AMERICA
ELECTRONIC MESSAGING
ASSOCIATION

Raymond G. Bender, Jr., Esq.
J. G. Harrington, Esq.
Dow, Lohnes & Albertson, PLLC
1200 New Hampshire Avenue, NW, Ste.
800
Washington, DC 20037
COUNSEL FOR VANGUARD CELLULAR
SYSTEMS, INC.

David Pierce
President
American Association of Community
Colleges
One Dupont Circle, NW, Ste. 410
Washington, DC 20036

Ray Taylor
President
Association of Community College Trustees
1740 N Street, NW
Washington, DC 20036

Martin Avery
Executive Director
Navajo Nation Washington Office
1101 - 17th Street, NW, Ste. 250
Washington, DC 20036

Robert M. Halperin, Esq.
Crowell & Moring
1001 Pennsylvania Avenue, NW
Washington, DC 20004
COUNSEL FOR THE STATE OF ALASKA

Michael J. Karson, Esq.
2000 West Ameritech Center Drive, Room
4H88
Hoffman Estates, IL 60196-1025
ATTORNEY FOR AMERITECH

Philip L. Verveer, Esq.
Willkie Farr & Gallagher
Three Lafayette Centre
1155 - 21st Street, NW
Washington, DC 20036
COUNSEL FOR:
TELE-COMMUNICATIONS, INC.
THE GUAM PUBLIC UTILITIES
COMMISSION

Michael F. Altschul, Esq.
Vice President and General Counsel
Cellular Telecommunications Industry
Association
1250 Connecticut Avenue, NW, Ste. 200
Washington, DC 20036

Jeffrey Blumenfeld, Esq.
Glenn B. Manishin, Esq.
Christy C. Kunin, Esq.
Christine A. Mailloux, Esq.
Blumenfeld & Cohen - Technology Law
Group
1615 M Street, NW, Ste. 700
Washington, DC 20036
COUNSEL FOR NETSCAPE
COMMUNICATIONS CORPORATION

James S. Blaszak, Esq.
Kevin S. DiLallo, Esq.
Levine, Blaszak, Block & Boothby
1300 Connecticut Avenue, NW, Ste. 500
Washington, DC 20036
COUNSEL FOR AD HOC
TELECOMMUNICATIONS USERS
COMMITTEE

Gary M. Epstein, Esq.
Teresa D. Baer, Esq.
Michael S. Wroblewski, Esq.
Latham & Watkins
1001 Pennsylvania Avenue, NW, Ste. 1300
Washington, DC 20004
COUNSEL FOR PACIFIC TELECOM, INC.

Fiona Branton, Esq.
Director of Government Relations and
Regulatory Counsel
Information Technology Industry Council
1250 Eye Street, NW
Washington, DC 20005

Brad E. Mutschelknaus, Esq.
John J. Heitmann, Esq.
Kelley Drye & Warren
1200 - 19th Street, NW
Washington, DC 20036
COUNSEL FOR:
LCI INTERNATIONAL TELECOM
CORPORATION
THE COMPETITIVE
TELECOMMUNICATIONS ASSOCIATION

Kathy L. Shobert
Director, Federal Affairs
General Communication, Inc.
901 - 15th Street, NW, Ste. 900
Washington, DC 20005

Margot Smiley Humphrey, Esq.
Koteen & Naftalin, LLP
1150 Connecticut Avenue, NW
Washington, DC 20036
COUNSEL FOR CENTURY TELEPHONE
ENTERPRISES, INC.

David A. Beckett, Esq.
Assistant Attorney General
Colorado Public Utilities Commission
1580 Logan Street, Office Level 2
Denver, CO 80203

Gene P. Belardi
Vice President
MobileMedia Communications, Inc.
2101 Wilson Boulevard, Ste. 935
Arlington, VA 22201

Kofi Asiedu Ofori, Esq., Counsel
Office of Communication of the United
Church of Christ
2000 M Street, NW, Ste. 400
Washington, DC 20036
COUNSEL FOR
UNITED CHURCH OF CHRIST
THE ALLIANCE FOR COMMUNITY MEDIA
MINORITY MEDIA &
TELECOMMUNICATIONS
COUNCIL

Mark C. Rosenbaum, Esq.
Peter H. Jacoby, Esq.
Judy Sello, Esq.
295 North Maple Avenue
Room 3244J1
Basking Ridge, NJ 07920
COUNSEL FOR AT&T

Dennis L. Bybee, Ph.D.
Associate Executive Officer
International Society for Technology in
Education
P.O. Box 4437
Alexandria, VA 22303
FOR ACCESS TO COMMUNICATIONS
FOR EDUCATION (ACE) COALITION

Cheryl L. Parinno
Chairman
Public Service Commission of Wisconsin
610 North Whitney Way
Madison, WI 53707-7854

Timothy R. Graham, Esq.
Robert M. Berger, Esq.
Joseph M. Sandri, Jr., Esq.
WinStar Communications, Inc.
1146 - 19th Street, NW
Washington, DC 20036

David R. Poe, Esq.
Yvonne M. Coviello, Esq.
LeBoeuf, Lamb, Greene & MacRae, LLP
1875 Connecticut Avenue, NW, Ste. 1200
Washington, DC 20009
COUNSEL FOR TIME WARNER
COMMUNICATIONS HOLDINGS, INC.

Lynn C. Silver
Education Policy Manager
Apple Computer, Inc.
1667 K Street, NW, Ste. 410
Washington, DC 20006

Brian R. Moir, Esq.
Moir & Hardman
2000 L Street, NW, Ste. 512
Washington, DC 20036-4907
COUNSEL FOR INTERNATIONAL
COMMUNICATIONS ASSOCIATION

Mel Engel
Vice President, Special Projects
c/o Bruce D. Jacobs, Esq.
Jason S. Roberts, Esq.
Fisher Wayland Cooper Leader &
Zaragoza, LLP
2001 Pennsylvania Avenue, NW, Ste. 400
Washington, DC 20006
COUNSEL FOR WAVEPHORE, INC.

The Honorable Carl T. C. Gutierrez
Governor of Guam
P O. Box 2950
Agana, GUAM 96910

David Cosson
L. Marie Guillory
Steve Watkins
NTCA
2626 Pennsylvania Avenue, NW
Washington, DC 20037
FOR THE RURAL TELEPHONE
COALITION

Lisa M. Zaina
Ken Johnson
OPASTCO
21 Dupont Circle, NW, Ste. 700
Washington, DC 20036
FOR THE RURAL TELEPHONE
COALITION

Lon C. Levin, Esq.
Vice President and Regulatory Counsel
AMSC Subsidiary Corporation
10802 Park Ridge Boulevard
Reston, VA 22091

Robert M. Lynch, Esq.
Durward D. Dupre, Esq.
Mike Zpevak, Esq.
Darryl W. Howard, Esq.
Southwestern Bell Telephone Company
One Bell Center, Ste. 3520
St. Louis, MO 63101

David A. Irwin, Esq.
Irwin, Campbell & Tannenwald, PC
1730 Rhode Island Avenue, NW
Washington, DC 20036
COUNSEL FOR ITCs, Inc.

Rodney L. Joyce, Esq.
Edwin N. Lavergne, Esq.
J. Thomas Noland, Esq.
Ginsburg, Feldman and Bress, Chtd.
1250 Connecticut Avenue, NW
Washington, DC 20036
COUNSEL FOR THE INTERACTIVE
SERVICES ASSOCIATION

Michael J. Ettner, Esq.
Senior Assistant General Counsel
Personal Property Division
General Services Administration
18th & F Streets, NW, Rm. 4002
Washington, DC 20405

John C. Beachboard
Charles R. McClure
Kristin R. Eschenfelder
School of Information Studies
Syracuse University
4-116 Center for Science & Technology
Syracuse, NY 13244-4100

David C. Cwyer, Ph.D.
Apple Classrooms of Tomorrow
Apple Computer, Inc.
1 Infinite Loop
Cupertino, CA 95014

Andrea M. Kelsey, Esq.
Office of the Ohio Consumers' Counsel
77 South High Street, 15th Floor
Columbus, OH 43266-0550

Morton Bahr
President
Communications Workers of America

Robert D. Carlitz
Executive Director
Information Renaissance
c/o Anthony P. Picadio
600 Grant Street, Ste. 4680
Pittsburgh, PA 15219

Kathleen Q. Abernathy, Esq.
David A. Gross
1818 N Street, NW
Washington, DC 20036
COUNSEL FOR AIRTOUCH
COMMUNICATIONS, INC.

P. Kenneth Komoski
Founding Director
The LINCT Coalition
466 Pleasant Street
Melrose, MA 02176-4522

Kevin Taglang
Benton Foundation
1634 Eye Street, NW
Washington, DC 20006

Jay C. Keithley, Esq.
Leon M. Kestenbaum, Esq.
H. Richard Juhnke, Esq.
1850 M Street, NW, Ste. 1100
Washington, DC 20036
COUNSEL FOR SPRINT CORPORATION

William H. Smith, Jr.
Chief
Bureau Rate & Safety Evaluation
Iowa Utilities Board
Lucas State Office Building
Des Moines, IA 50319

Joan Mandeville
General Manager
Montana Telephone Association
P.O. Box 2166
Great Falls, MT 59403

Jeffrey C. Ogden
Merit Associate Director for MichNet
Merit Network, Inc.
4251 Plymouth Road
Ann Arbor, MI 48105-2785

The Honorable Richard Weiner
Assistant Attorney General for the State of
New Mexico
P.O. Drawer 1508
Santa Fe, NM 87504
FOR THE HONORABLE TOM UDALL,
ATTORNEY GENERAL FOR THE STATE
OF NEW MEXICO

Kenneth Lein, Manager
Winnebago Cooperative Telephone
Association
704 East Main
Lake Mills, IA 50450

Mark D. Wilkerson, Esq.
Brantley & Wilkerson, PC
P O. Box 830
Montgomery, AL 36101-0830
COUNSEL FOR THE ALABAMA-
MISSISSIPPI TELEPHONE ASSOCIATION

Henry M. Rivera, Esq.
Larry S. Solomon, Esq.
J. Thomas Nolan, Esq.
Ginsburg, Feldmand and Bress, Chtd.
1250 Connecticut Avenue, NW
Washington, DC 20036
COUNSEL FOR METRICOM, INC.

Mary Ellen Emmons
President
the Alaska Library Association
P O. Box 81084
Fairbanks, AK 99708

The Honorable Albert Vann
Member, New York State Assembly
Legislative Office Building, #422
Albany, NY 12248
FOR:
THE NATIONAL BLACK CAUCUS OF
STATE LEGISLATORS
TELECOMMUNICATIONS AND ENERGY
COMMITTEE

Howard J. Symons, Esq.
Jennifer A. Purvis, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and
Popeo, PC
701 Pennsylvania Avenue, NW, Ste. 900
Washington, DC 20004
COUNSEL FOR CONTINENTAL
CABLEVISION, INC.

Catherine R. Sloan, Esq.
Richard L. Fruchterman, Esq.
Richard S. Whitt, Esq.
WORLD COM, INC.
d/b/a LDDS WorldCom
1120 Connecticut Avenue, NW, Ste. 400
Washington, DC 20036

Michael J. Nowick
Executive Secretary/Treasurer
Minnesota Telephone Association
1650 World Trade Center
30 East 7th Street
St. Paul, MN 55101-4901

Virginia J. Taylor, Esq.
Richard A. Elbrecht, Esq.
California Department of Consumer Affairs
400 R Street, Ste. 3090
Sacramento, CA 95814-6200

Alfred M. Mamlet, Esq.
Marc A. Paul, Esq.
Steptoe & Johnson, LLP
1330 Connecticut Avenue, NW
Washington, DC 20036

Dr. Barbara O'Connor
Chairwoman
Mary Gardiner Jones
President
c/o Henry Geller, Esq.
901 - 15th Street, NW, Ste. 230
Washington, DC 20005
COUNSEL FOR ALLIANCE FOR PUBLIC
TECHNOLOGY

Richard J. Johnson, Esq.
Brian T. Grogan, Esq.
Moss & Barnett
4800 Norwest Center
90 South Seventh Street
Minneapolis, MN 55402-4129
COUNSEL FOR MINNESOTA
INDEPENDENT COALITION

Alison M. Hughes, MPA
Associate Director
Health Sciences Center
The University of Arizona
2501 East Elm Street
Tucson, AZ 85716

Cynthia B. Miller, Esq.
Associate General Counsel
State of Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

David J. Strom, Esq.
In-House Counsel
American Federation of Teachers
555 New Jersey Avenue, NW
Washington, DC 20001

Cheryl A. Tritt, Esq.
James A. Casey, Esq.
Morrison & Foerster, LLP
2000 Pennsylvania Avenue, NW, Ste. 5500
Washington, DC 20006
COUNSEL FOR CHEYENNE RIVER
SIOUX TELEPHONE AUTHORITY and
GOLDEN WEST TELECOMMUNICATIONS
CO-OP

Benjamin Perez, Esq.
Gerald M. Zuckerman, Esq.
Mark J. Becker, Esq.
Abacus Communications Company
1801 Columbia Road, NW, Ste. 101
Washington, DC 20009
COUNSEL FOR THE HISPANIC
INFORMATION AND
TELECOMMUNICATIONS NETWORK,
INC.

Harold M. Thompson
Chief Operating Officer
Iowa Communications Network
P.O. Box 587
Johnston, IA 50131-0587

Gail L. Polivy, Esq.
1850 M Street, NW, Ste. 1200
Washington, DC 20036
COUNSEL FOR GTE SERVICE
CORPORATION and its affiliated domestic
telephone operating companies

Kathryn Marie Krause, Esq.
1020 - 19th Street, NW, Ste. 700
Washington, DC 20036
COUNSEL FOR U S WEST, INC.

Angela J. Campbell
Institute for Public Representation
Georgetown University Law Center
600 New Jersey Avenue, NW
Washington, DC 20001
FOR:
U.S. CATHOLIC CONFERENCE
NATIONAL COALITION FOR THE
HOMELESS
WASHINGTON LEGAL CLINIC FOR THE
HOMELESS
AMERICAN WOMEN'S ROUNDTABLE
COMMUNITY TECHNOLOGY INSTITUTE
CONSUMER ACTION
FARMWORKER JUSTICE FUND
FIFTH STREET CONNECTION
HEARTLAND ALLIANCE FOR HUMAN
NEEDS AND RIGHTS
INTERSTATE MIGRANT EDUCATION
COUNCIL
NATIONAL ASSOCIATION OF MIGRANT
EDUCATORS
MARCIA ZASHIN
EDUCATION CONSULTANT TO
CLEVELAND PUBLIC SCHOOLS
AND PROJECT ACT
MIGRANT LEGAL ACTION PROGRAM
VERMONT MIGRANT EDUCATION
PROGRAM

Mary McDermott
Linda L. Kent
Charles D. Cosson
United States Telephone Association
1401 H Street, NW, Ste. 600
Washington, DC 20005

The Honorable Donald L. Howell, II
Deputy Attorney General for the State of
Idaho
for the Idaho Public Utilities Commission
P.O. Box 83720
Boise, ID 83720-0074

Maureen A. Scott, Esq.
Assisant Counsel
Commonwealth of Pennsylvania Public
Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Charles H. Helein, Esq.
Helein & Associates, PC
8180 Greensboro Drive, Ste. 700
McLean, VA 22102
GENERAL COUNSEL FOR AMERICA'S
CARRIERS TELECOMMUNICATION
ASSOCIATION

Juan N. Babauta
Resident Representative to the United
States
Commonwealth of the Northern Marianas
2121 R Street, NW
Washington, DC 20008

Michael Casserly
Executive Director
Council of the Great City Schools
1301 Pennsylvania Avenue, NW, Ste. 702
Washington, DC 20004

J. Manning Lee, Esq.
Vice President, Regulatory Affairs
Teleport Communications Group, Inc.
Two Teleport Drive, Ste. 300
Staten Island, NY 10311